I.P. Sharp Associates

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```
ENTER DATABASE:
                DISCLOSURE
*** DISCLOSURE DATABASE ***

ENTER CATEGORY NUMBER(S) OR REPORT NUMBER(S):
                                        HELP

THESE CATEGORIES AND REPORT NUMBERS ARE AVAILABLE FOR DISCLOSURE:


   CATEGORIES          REPORT NUMBERS

1. ASSETS             - 101 TO 104
2. LIABILITIES        - 201 TO 204
3. INCOME STATEMENT   - 301 TO 304
4. 5 YEAR SUMMARY     - 401 TO 405
5. RATIOS             - 501
6. MISCELLANEOUS      - 601 TO 604
7. *COMPANY RECORD    - 701 TO 717

*   PRESTORED, PREFORMATTED REPORT(S).

ENTER CATEGORY NUMBER(S) OR REPORT NUMBER(S):
                                        6
THE FOLLOWING REPORTS ARE AVAILABLE FOR THE CATEGORIES CHOSEN:

601.  RETURN ON EQUITY, BOOK VALUE AND LONG TERM DEBT
602.  RETURN ON EQUITY, PROFITABILITY AND GROWTH
603.  STOCK EXCHANGE, TICKER SYMBOL, AND COMPANY NAME
604.  TELEMARKETING REPORT

CHOOSE ONE OR MORE REPORTS:
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INFOMAGIC

Editors: Marc Odho, and Ann Rockley. *Contributing Writers:* Steve Bested, Cathy Calvert, Sally Drew, Sandra Eadie, Karen Hoy, Bill Lidington, Nancy Petersons, Gert Osterburg, Rick Procter, Ann Rockley, Mark Seltzer, Loon Wai Sum.

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FINANCIAL AND ECONOMIC DATA BASES

I.P. Sharp Associates is committed to supplying accurate and timely financial and economic data. Currently I.P. Sharp provides the following financial and economic data bases. The $ (dollar) indicates that there is a surcharge for the use of this data base. The data bases with check marks beside them are discussed in this issue.

FINANCE

Agricultural Commodities
Australian Bank Bill Rates
Australian Commodities
Australian Financial Data Base
$Australian Funds Markets
Australian Graduate School of Management Data
Australian Stock Exchange Indices
Bank of Canada Weekly Financial Statistics
Bank for International Settlements
Canadian Bonds
Canadian Chartered Banks - Monthly
Canadian Chartered Banks - Quarterly
Canadian Chartered Banks - Yearly
Canadian Department of Insurance
Cdn. Dept. of Insurance Property and Casualty
Canadian Stock Options
Chartered Banks Annual Financial Statements
Chartered Banks Monthly Statement of Assets and Liabilities
Chartered Banks Quarterly Income Statement
Commodities
Commonwealth Bank Bond Index
Currency Exchange Rates
✓ $Disclosure
Federal Reserve Board Weekly
$F.P. Canadian Corporate
F.P. Securities
$Financial Times-Actuaries Share Indices
$Financial Times Share Information
Fund Monitor Unit Trusts and Insurance Bonds
Money Market Rates
North American Stock Market
✓ Singapore Stock Exchange
Sydney Stock Exchange Share Prices
Sydney Stock Exchange STATEX Service
Toronto Stock Exchange 300 Index Stock Statistics
✓ United States Stock Market
U.S. Stock Options

ECONOMICS

✓ Agricultural Census
Australian Bureau of Statistics
Australian Economic Statistics
Australian Input-Output
Australian Sector Cash Flow
$Business International Economic Forecasts
Business International Historical Data
Canadian Census, 1981
CANSIM Mini Base and Supplement
✓ Citibase
German Bundesbank, Monthly
International Financial Statistics
National Planning Association Demographic Data
National Planning Association Economic Data
Organization for Economic Co-operation and Development
$S.J. Rundt World Risk Analysis Package
✓ Statisbund
U.K. Central Statistics Office
U.S. Consumer Price Indices
✓ U.N. Commodity Trade Statistics
U.S. Federal Reserve Board, Quarterly
U.S. Flow of Funds
U.S. Producer Price Indices
✓ World Bank Debt Tables

IN THIS ISSUE

1 **INFOMAGIC**
A new service for data base users, INFOMAGIC permits less experienced and casual users to obtain useful reports, with little or no training, at a constant and predictable cost per hour.

2 **Tracking the U.S. Economy with CITIBASE and INFOMAGIC**
You can now get a report on the most important statistics from CITIBASE—simply and quickly—using INFOMAGIC.

5 **Analysts' Forecasts Available Online**
Quarterly forecasts of earnings, dividends, cash flow, and prices for approximately 300 companies trading on the Toronto Stock Exchange.

9 **New Singapore Stock Exchange Data Base**
The SINGSTOCK data base contains descriptive and daily trading information for over 350 stocks traded on the Singapore Stock Exchange, as well as over 20 indices covering the Singapore, Kuala Lumpur, and other Asian exchanges.

13 **New Features for Accessing the U.N. Commodity Trade Statistcs**
Data retrieval and presentation facilities have been enhanced.

15 **New 1981 Canadian Agricultural Census Data Base**
Statistics resulting from the 1981 Canadian Census of Agriculture are now available.

16 **STATISBUND**
Die neueste Datenbank von I.P. Sharp ist STATISBUND die Datenbasis des Informationssystems des Statistischen Bundesamtes.

19 **STATISBUND**
The Statisbund data base contains a wide range of statistics relating to the economy of West Germany.

20 **Changes to the World Debt Tables**
The data base has been expanded to include 180 facts per country, and some forecasted series for each country.

22 **Additions to the USSTOCK Data Base**
CUSIP change information is now available.

23 **New Facts Added to DISCLOSURE**
The DISCLOSURE data base has recently been enhanced by the addition of 80 new facts for each company in the annual portion of the data base.

26 **New Facilities Added to Data Base Keywords**

28 **New Contributing Writers**

30 **Publications**

INFOMAGIC

I.P. Sharp Associates is pleased to announce the availability of a new service for data base users—INFOMAGIC. INFOMAGIC permits less experienced and casual users to obtain useful reports, at a predictable price, with little or no training. More experienced users will find INFOMAGIC attractive in that many common data base problems, such as searching through a directory for a particular series code, are solved by INFOMAGIC. The hourly rate schedule for INFOMAGIC takes the guess-work out of the cost for a particular standard report. In North America, for example, the rates are:

$60/hour at 300 baud (30 characters per second)
$120/hour at 1200 baud (120 characters per second)

These rates include all telecommunication charges, but do not include any applicable data base royalties. However, the majority of I.P. Sharp data bases do not have royalty fees or surcharges associated with usage.

Users of the data bases on the I.P. Sharp system have access to one of the largest collections of time series in the world—over 45 million in all. Up until now, there have been three ways to take advantage of this data, listed in decreasing degrees of difficulty:

1) use APL and a data retrieval language such as RETRIEVE.

2) use MAGIC and SUPERPLOT to retrieve and analyze the data. To date, this method has proven immensely popular, but it can still be difficult for the casual user to master.

3) ask your local I.P. Sharp representative to prepare the report for you, at standard consulting rates.

Now, provided the reports you want are included, you can get at the data in a new way, using the user-friendly INFOMAGIC system. We currently have a subset of our data bases available through INFOMAGIC, but the number of data bases available and the number of reports available for each data base is growing daily. If you have any reports that you think would be useful in INFOMAGIC, let us know, so that they can be included. Two data bases for which a large collection of reports already exists are CITIBASE (U.S. Economic data) and DISCLOSURE (U.S. Corporate data). A detailed article on CITIBASE used in conjunction with INFOMAGIC follows.

INFOMAGIC is well suited to 80-character screen monitors, such as those available with most microcomputers. In fact, it operates very nicely in conjunction with MICROCOMM, a diskette available from I.P. Sharp Associates for IBM PC users, and announced in the last issue of the newsletter.

If you wish to take advantage of INFOMAGIC at the fixed hourly rate structure, you must first be registered as an INFOMAGIC user. Contact your local I.P. Sharp office for further information, and for a copy of the INFOMAGIC contract.

TRACKING THE U.S. ECONOMY WITH CITIBASE AND INFOMAGIC

Sandra Eadie

Is this scenario familiar? To calculate a rate increase you urgently need the current Consumer Price Index (CPI), but your copy of the CITIBASE manual with the appropriate series code is missing. Or having found the series code for CPI, you forget how to set a timeframe or calculate percent changes, because it has been a while since you last used MAGIC. The MAGIC manual is not at hand either? Other things that occur usually when time is at a premium are: forgetting to set *AUTOLABEL* to get the data descriptions; not knowing what timeframe to set to get the most current data.

These are problems of the past. Now you can simply)*LOAD* 39 *INFOMAGIC* and quickly get a report on the most important U.S. economic statistics from the CITIBASE data base. To do this you need no knowledge of MAGIC or APL. The most popular statistics have been summarized in INFOMAGIC. Just follow a series of friendly prompts and you have a set of reports on economic conditions in the United States at your fingertips. These reports were designed by CITIBASE economists with the assistance of I.P. Sharp Associates and together provide an overview of the U.S. economy. The example at the end of this article demonstrates how to access the reports.

There are 24 reports organized into the following categories:

1. National Income and Product Accounts
2. Economic Indicators and Forecasts
3. Labor Statistics
4. Financial
5. Price Indexes
6. Construction
7. Manufacturing and Trade
8. Industrial Production

To see the list of reports available within any particular category, at the prompt:

```
ENTER CATEGORY NUMBER(S) OR REPORT NUMBER(S):
```

enter the category number you are interested in and you will get a list of the reports in those categories. Because of the nature of economic data there will be occasional changes, so it is always best to check the list if you have not used INFOMAGIC for a while. We will also add reports if there is sufficient demand.

Special note should be made of the reports which are general surveys. At the time of writing, there are three reports in Category 2—Economic Indicators and Forecasts. One is a survey of leading economists' forecasts of key U.S. economic indicators for the next 5 quarters. This has been assembled by the American Statistical Association and the National Bureau of Economic Research. The survey contains the current performance plus the median of the forecasts for 5 quarters ahead. Another report contains Business Cycle leading indicators from the Business Conditions Digest. Finally, for whatever timeframe you choose, a third report prints historical data for 12 of the most important economic and financial indicators.

The CITIBASE reports incorporate several useful features. Each time series is labelled with its data base access code, which can also be used in MAGIC to retrieve data. There are complete descriptions for each series, including what the units are and whether they are seasonally adjusted. All the significant digits available are printed for each series. These reports calculate percentage changes as

appropriate. The reports are suitable for direct insertion into executive briefing notes. Since the series chosen for the reports were selected by economists with experience of the requirements of the user community, you can be assured that the most important statistics are available through this service.

INFOMAGIC is available either by loading the workspace 39 *INFOMAGIC* or by typing *INFOMAGIC* in 39 *MAGIC*. The following is a typical example of an INFOMAGIC session.

```
 WELCOME TO INFOMAGIC.  ENTER  DESCRIBE  FOR DOCUMENTATION.

ENTER DATABASE:
              CITIBASE
*** CITIBASE DATABASE ***

ENTER CATEGORY NUMBER(S) OR REPORT NUMBER(S):
                                        HELP

THESE CATEGORIES AND REPORT NUMBERS ARE AVAILABLE FOR THE CITIBASE DATABASE.


   CATEGORIES                              REPORT NUMBERS

1. NATIONAL INCOME AND PRODUCT ACCOUNTS  - 101 TO 107
2. ECONOMIC INDICATORS AND FORECASTS     - 201 TO 203
3. LABOR STATISTICS                      - 301
4. FINANCIAL                             - 401
5. PRICE INDEXES                         - 501 TO 504
6. CONSTRUCTION                          - 601
7. MANUFACTURING AND TRADE               - 701 TO 704
8. INDUSTRIAL PRODUCTION                 - 801 TO 803


ENTER CATEGORY NUMBER(S) OR REPORT NUMBER(S):
                                        203
DO YOU WISH LATEST 26 MONTHS OF DATA?:
                                     NO
ENTER START MONTH AND START YEAR, E.G. 2 79:
                                        5 82
ENTER END MONTH AND END YEAR, E.G. 3 80:
                                     5 83
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22 JUN 1983

U.S. ECONOMIC INDICATORS--HISTORICAL LEVELS
SEASONALLY ADJUSTED

	CONSUMER PRICE INDEX	RETAIL SALES ($MIL)	HOUSING STARTS (000)	MERCHAND TRADE BALANCE ($MIL)	PRIME RATE NSA	UNEMPLOY RATE	TOTAL CONSUMER CREDIT
	PUNEW	RTRR	HSFR	FTB	FYPR	LHURR	CCIS
MAY/82	286.9	90,813	1,028	-2,353	16.5	9.3	332,142
JUN/82	290.0	88,603	910	-2,364	16.5	9.4	333,884
JUL/82	291.7	89,469	1,185	-1,790	16.3	9.7	334,276
AUG/82	292.6	89,069	1,046	-5,467	14.4	9.7	334,343
SEP/82	292.9	89,897	1,134	-3,261	13.5	10.1	335,180
OCT/82	294.1	90,905	1,142	-4,335	12.5	10.3	335,593
NOV/82	294.1	92,492	1,361	-3,041	11.9	10.6	336,897
DEC/82	293.3	92,459	1,280	-2,808	11.5	10.7	339,316
JAN/83	293.8	92,295	1,694	-2,628	11.2	10.2	342,041
FEB/83	293.2	91,164	1,784	-2,689	11.0	10.2	342,776
MAR/83	293.6	93,263	1,605	-2,774	10.5	10.1	345,358
APR/83	295.3	94,864	1,504	-3,697	10.5	10.1	347,629
MAY/83		96,866	1,791		10.5	10.0	

	MONEY SUPPLY M1-$BIL	AVERAGE WEEKLY EARNINGS	BUSINESS LOANS (BANKS) ($BIL)	MANUF. NEW ORDERS ($MIL)	MANUF. SHIPMENT ($MIL)	RETAIL INVENTORY /SALES
	FM1	LEW	FCLCI	MO	MFGS	IVRR/RTRR
MAY/82	452.4	267.75	378.9	159,466	163,007	1.37
JUN/82	453.4	267.68	383.4	159,986	163,120	1.43
JUL/82	454.4	268.73	386.7	158,913	162,417	1.42
AUG/82	458.3	269.00	387.9	155,700	160,016	1.44
SEP/82	463.2	269.00	392.5	156,572	160,458	1.44
OCT/82	468.7	269.27	394.8	152,362	154,194	1.42
NOV/82	474.0	269.97	392.0	152,604	154,318	1.38
DEC/82	478.2	272.14	392.4	157,382	154,543	1.39
JAN/83	482.1	276.59	395.2	162,871	158,239	1.39
FEB/83	491.1	272.90	394.9	157,757	158,081	1.43
MAR/83	497.6	275.27	396.2	162,587	161,803	1.39
APR/83	496.5	277.46	392.9	166,064	163,371	1.37
MAY/83	507.2	280.45	393.0			

SOURCE: CITIBASE

ANALYSTS' FORECASTS AVAILABLE ONLINE

Karen Hoy and Sandy Osborn

In conjunction with Garmaise & Associates, I.P. Sharp Associates has created the R.E.S. (Research Evaluation Service) data base of quarterly forecasts of earnings, dividends, cash flow, and prices for approximately 300 companies trading on the Toronto Stock Exchange. Forecasts are currently provided by research analysts from 19 major investment dealers in Canada.

From this data, reports containing individual analysts' forecasts and consensus forecasts are produced for each company, so that an institutional investor can quickly assess the opinions of analysts from various brokers about a particular stock. Screens on individual analysts' deviations from the consensus are possible. The 300 companies in the system may be ranked according to various criteria to illustrate investment potential. These include:

- consensus projected total return
- consensus projected earnings appreciation
- projected price earnings ratio
- consensus projected dividend yield
- standard deviation of consensus earnings
- standard deviation of consensus total return

Analysts' forecasting abilities will be assessed through comparison of actual and forecast values. Customization of other reports utilizing this data is also possible. Reports are available online immediately after each quarterly deadline for input of forecasts, or in a hardcopy publication a few days later.

Garmaise & Associates, in conjunction with a Toronto brokerage firm, act as soft dollar conduits for use of the R.E.S. system, thus covering all timesharing costs to I.P. Sharp.

You must be enrolled before using the system, so that participating brokers can grant or deny access to the forecasts they contribute individually for the consensus. The system is aimed at the institutional market. It is not available to retail investors.

For more information, please contact Karen Hoy or Sandy Osborn in Toronto branch. If you are a member of the MAILBOX system, message *RESQ*.

The following is a sample of the reports available:

```
** R E S   MARKET CONSENSUS **
COMMAND OR STOP:
                FORECASTS
WHICH BROKER NUMBER(S) OR 'ALL'?:
                                ALL
MOST RECENT DATA AVAILABLE FOR 198306
CONTINUE? (Y/N) :
                Y
ALL,INDUSTRY, OR SELECT COMPANIES? (A/I/S) :
                                        S
WHICH STOCK SYMBOLS? :
                    NA
CURRENT ACTUAL PRICE OR ACTUAL PRICE AT TIME FORECASTS MADE? (C/F) :
                                                              F
TERMINAL OR HSP? (T/H) :
                        T
ALIGN PAPER
```

R E S
MARKET CONSENSUS
JUNE 1983

NATIONAL BANK OF CANADA
INDUSTRY GROUP: FINANCIAL SERVICES

INVESTMENT BROKER	RESEARCH ANALYST	FORECAST PER SHARE 198310	CASH FLOW SHARE 198410	FORECAST PER 198310	EARNINGS SHARE 198410	FORECAST PER 198310	DIVIDEND SHARE 198410	FORECAST PRICE 198406	PROJECTED RETURN 19830630 198406
10 ANALYSTS REPORTING.									
RESEARCH SECURITIES	JOHN THA			2.30	3.00	0.30	0.64	20.00*	72.0*
DOMINION SECURITIES	R GAY			2.00	2.60	0.60	0.90*		
DEACON, HODGSON	S. COHEN			2.25	2.75	0.30	0.70	17.00	47.5
.				.		.			
report truncated									
.				.		.			
CONSENSUS FORECASTS				2.22	2.68	0.41	0.64	16.69	42.5
STANDARD DEVIATION				0.25	0.49	0.19	0.14	2.46	21.9
ACTUAL EPS AT 198210 DPS AT 198210 CF AT 198210 PRICE AT 19830630				-0.80	-0.80	0.30	0.30	12.00	
PERCENT DEVIATION FROM CONSENSUS:									
RESEARCH SECURITIES	JOHN THA			3.8	11.8	-27.0	-0.4	19.9	69.5
DOMINION SECURITIES	R GAY			-9.8	-3.1	45.9	40.1		
DEACON, HODGSON	S. COHEN			1.5	2.5	-27.0	8.9	1.9	11.8
.				.		.			
report truncated									
.				.		.			

```
COMMAND OR STOP:
                RANK
MOST RECENT DATA AVAILABLE FOR 198306
CONTINUE? (Y/N) :
                Y
THE FOLLOWING IS A LIST OF WHAT YOU MAY RANK BY:
1 - CONSENSUS PROJECTED EARNINGS APPRECIATION
2 - CONSENSUS PROJECTED DIVIDEND YIELD
3 - STANDARD DEVIATION OF CONSENSUS EARNINGS
4 - CONSENSUS PROJECTED TOTAL RETURN
5 - STANDARD DEVIATION OF CONSENSUS TOTAL RETURN
6 - PROJECTED PRICE-EARNINGS RATIO
ENTER NUMBER(S) OF WHAT TO RANK BY :
                                    4
HOW MANY OF THE 204 COMPANIES DO YOU WANT DISPLAYED FROM THE TOP AND BOTTOM
OF THE RANKING? :
                14
TERMINAL OR HSP? (T/H) :
                  T
ALIGN PAPER
```

CONSENSUS RANKING REPORT
==========

FORECASTS BY:

ALFRED BUNTING
BELL GOUINLOCK
BROWN BALDWIN
BURNS FRY LTD
DEACON, HODGSON
DOMINION SECURITIES
FIRST MARATHON
GARDINER WATSON
GORDON SECURITIES
LEVESQUE BEAUBIEN
LOEWEN ONDAATJE
MCLEAN MCCARTHY
NESBITT THOMSON
PEMBERTON H.W.
PITFIELD MACKAY
RESEARCH SECURITIES
RICHARDSON GREENSHD
R.A. DALY
WOOD GUNDY

CONSENSUS INDUSTRY RANKING

	AVERAGE 1 YR FORECAST PERCENT TOTAL RETURN	NO. STOCKS
GOLD	33.732	13
CONSUMER PRODUCTS	29.951	10
FINANCIAL SERVICES	24.892	17
COMMUNICATIONS+MEDIA	24.653	13
METALS+MINERALS	24.645	20
MERCHANDISING	23.936	21
PAPER+FOREST PRODUCTS	23.747	10
MANAGEMENT COMPANIES	23.044	9
TRANSPORTATION	22.410	2
OIL+GAS	19.650	34
PIPELINES	16.142	7
INDUSTRIAL PRODUCTS	15.578	25
UTILITIES	14.866	14
REAL ESTATE+CONSTRUCTION	14.619	8

CONSENSUS STOCK RATING - TOP COMPANIES

		PRICE 19830630	1 YR FORECAST TOTAL RETURN	STANDARD DEVIATION	NUMBER OF ANALYSTS
1	CANADA PACKERS INC.	22.250	123.071	13.030	4
2	SULPETRO LTD. B - F	5.375	72.093	53.437	5
3	CAMFLO MINES LIMITED	13.000	69.269	0.000	3
4	VESTGRON MINES LTD.	15.125	66.942	0.000	2
5	ROXY PETROLEUM LTD. B O	3.050	55.738	34.776	3
6	CONSUMERS DISTRIBUTING CO. F	7.250	47.377	14.806	4
7	BACHELOR LAKE GOLD MINES INC. - O	7.500	46.667	0.000	2
8	FRASER INC.	18.000	45.000	32.410	2
9	DICKENSON MINES LIMITED A - F	6.625	43.774	11.207	2
10	BATON BROADCASTING INC. A - F	14.000	43.173	15.287	6
11	LAKE SHORE MINES LTD.	49.000	42.857	0.000	2
12	NATIONAL BANK OF CANADA	12.000	42.488	21.899	10
13	TOTAL PETROLEUM (NORTH AMERICA) LTD.	15.875	41.932	12.920	6
14	BRALORNE RESOURCES LTD	5.875	41.702	19.257	2

CONSENSUS STOCK RATING - BOTTOM COMPANIES

		PRICE 19830630	1 YR FORECAST TOTAL RETURN	STANDARD DEVIATION	NUMBER OF ANALYSTS
190	OCELOT INDUSTRIES LTD. B - F	11.000	1.515	40.741	4
191	ATCO LIMITED CLASS I - F	10.125	0.741	1.117	4
192	LEIGH INSTRUMENTS LIMITED	5.250	0.000	0.000	2
193	INTERPROV. STEEL ϵ PIPE LTD.	27.000	(0.309)	12.477	7
194	NOWSCO WELL SERVICE LTD	22.500	(0.326)	7.746	3
195	INLAND NATURAL GAS CO. LTD.	16.000	(3.281)	3.315	2
196	OAKWOOD PETROLEUMS LIMITED	12.000	(4.167)	9.002	6
197	CDN. NATURAL RESOURCES LTD.	2.100	(4.762)	0.000	2
198	DAON DEVELOPMENT CORP.	2.340	(5.983)	14.804	7
199	MICC INVESTMENTS LTD	8.750	(7.810)	2.020	3
200	NU-WEST GROUP LTD. A	2.600	(11.538)	19.986	7
201	COSEKA RESOURCES LIMITED	4.050	(13.580)	17.459	3
202	PEMBINA RESOURCES LTD.	16.375	(20.611)	0.000	2
203	MASSEY-FERGUSON LIMITED	5.750	(30.435)	0.000	4

NEW SINGAPORE STOCK EXCHANGE DATA BASE

Mark Seltzer and Loon Wai Sum

A new stock exchange data base, SINGSTOCK, has been added to I.P. Sharp Associates' collection of financial and economic data bases. SINGSTOCK contains descriptive and daily trading information for over 350 stocks traded on the Singapore Stock Exchange, as well as over 20 indices covering the Singapore, Kuala Lumpur and other Asian exchanges.

For each stock, the following daily facts are available:

```
1  VOLUME
2  LOW
3  HIGH
4  CLOSE-BUY
5  CLOSE-SELL
6  LAST PRICE
7  PRICE/EARNINGS RATIO
```

These facts are updated on a daily basis, on the morning after the day's trading (about 10 a.m. Singapore time, 0200 U.T.C.).

Descriptive facts are also available for the stocks:

```
8  SECURITY CODE
9  SECURITY NUMBER
10 FULL NAME
11 DATE STOCK ADDED
12 DATE OF LAST QUOTE
13 DELIST INDICATOR
```

The initial letter of the security code (fact 8) indicates the industrial classification of the stock. The initial letters are:

A	Industrial and Commercial
B	Finance
C	Hotels
D	Properties
E	Debentures, Loans and Bonds
F	Plantations
G	Mining

For example:

A2573	Toshiba
F7830	Mentakaab Rubber

The various indices can also be identified by the initial letters of the stock code.

SES	Singapore Stock Exchange Indices
ST	Straits Times Indices
KL	Kuala Lumpur Indices
OI	Other Asian Indices

The *SES*, *ST*, and *KL* classifications include indices for Finance, Hotels, Industrials and Commercials, Mining, and Properties. The *OI* classification includes composite indices for the following exchanges: Taiwan, Bangkok, Hong Kong, South Korea, Manila, Tokyo, and New Zealand. For example:

SESFI	Singapore Stock Exchange Finance
STIN	Straits Times Industrials and Commercial
KLPL	Kuala Lumpur Plantations
OINDJ	Tokyo Nikkei—Dow Jones
OIMAN	Manila Mining

The Singapore, Kuala Lumpur, Tokyo Stock Exchange and Hong Kong indices are updated daily on the day following trading. The source for these indices, and the stock data, is the *Singapore Stock Exchange Daily Journal*. The other Asian indices are updated each week with the daily figures for the preceding week; the data is from the *Far Eastern Economic Review*. The index values are provided via fact 6.

The data for the stocks and Singapore, Kuala Lumpur, Tokyo Stock Exchange and Hong Kong indices is available from January 1975. The other Asian indices are available from January 1983. The data is adjusted for splits by the staff of I.P. Sharp Associates in Singapore.

Access to the SINGSTOCK data base is possible through either of I.P. Sharp Associates' data base access packages, MAGIC and RETRIEVE. Online documentation is available through these packages or the workspace 1 *DATABASES*. To obtain a two-page description of the data base, type:

```
SINGSTOCKD 'DESCRIBE'
```
in MAGIC or
```
∆VIEWDOC 'SINGSTOCK'
```
in RETREIVE

To obtain a directory of all the stock codes in the data base, and relevant details such as timeframe and full name, type:

```
SINGSTOCKD 'DIRECTORY'
```
in MAGIC or
```
∆DIRECTORY 'SINGSTOCK'
```
in RETRIEVE

To check on the status of the data base update, type:

```
TIMECHECK 'SINGSTOCK'
```
in MAGIC

Here is an example showing a simple access using MAGIC:

```
RESETOPTIONS ◇ AUTOLABEL
1 2 3 4 5 DAILY DATED 18 3 83 TO 24 3 83
'H' DISPLAY 'A0232' SINGSTOCKD 1 2 3 6
```

```
                    18MAR83   21MAR83   22MAR83   23MAR83   24MAR83
-------------------------------------------------------------------
CARLSBERG.
  VOLUME              2,000     7,000                         2,000
  LOW                  4.72      4.68      4.68      4.68      4.64
  HIGH                 4.72      4.70      4.70      4.70      4.64
  LAST                 4.72      4.68      4.68      4.68      4.64
-------------------------------------------------------------------
```

The screening facilities in the data base allow great flexibility in selecting which items are to be displayed. The next example displays the values of all the Kuala Lumpur Indices.

```
RESETOPTIONS ◇ AUTOLABEL ◇ COLWIDTH 11
1 2 3 4 5 DAILY DATED 11 4 83 15 4 83
TABLE '/Q/F8=KL' SINGSTOCKD 6
```

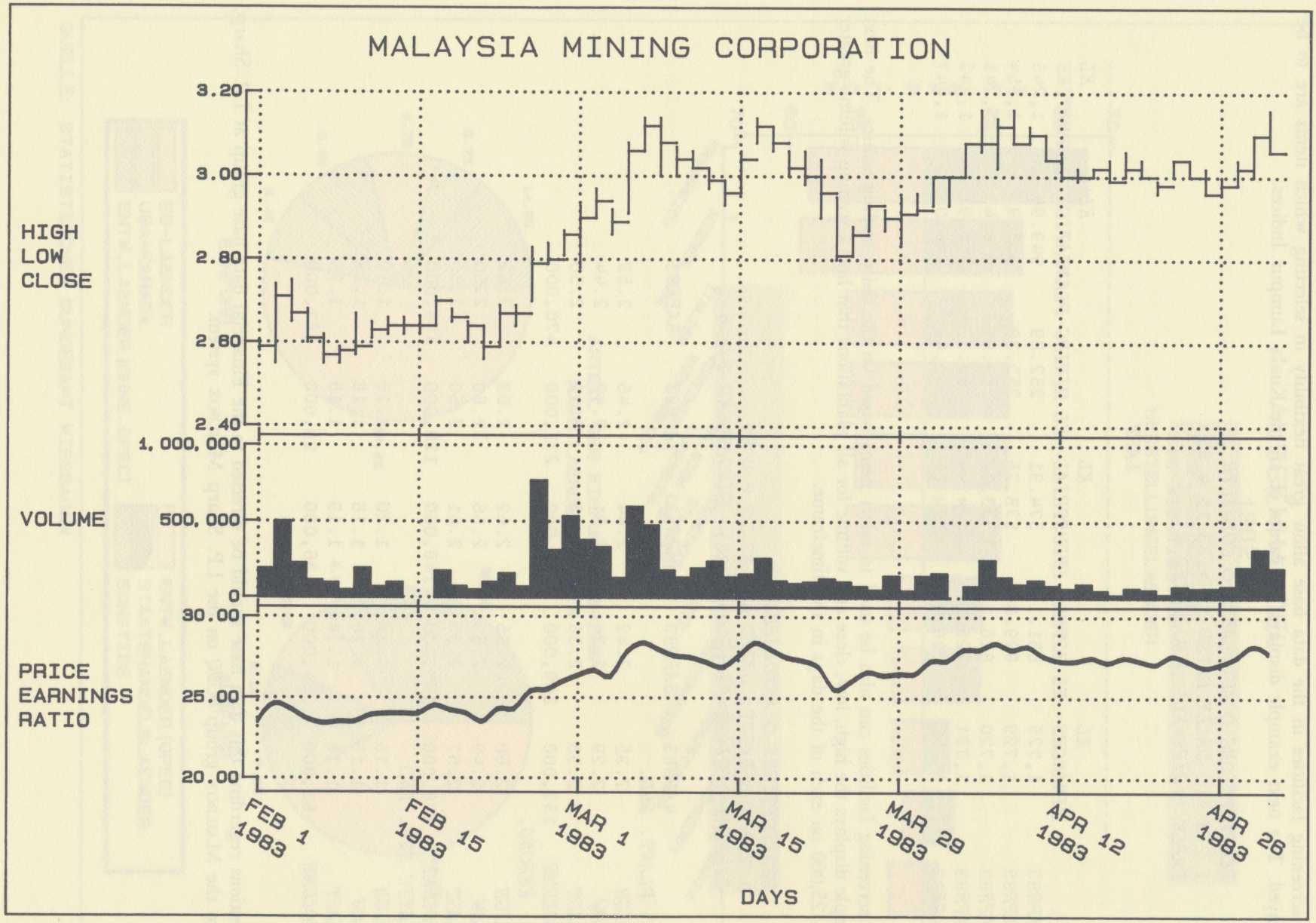
	LAST					
	KL FINANCES	KL HOTELS	KL INDUSTRIAL	KL MINING	KL PLANTATION	KL PROPERTIES
11APR83	1,725	831.11	574.91	252.89	949.96	1,245
12APR83	1,729	829.84	578.25	253.30	957.93	1,254
13APR83	1,720	828.16	573.30	252.91	955.43	1,241
14APR83	1,721	828.17	574.44	252.23	959.91	1,242
15APR83	1,722	826.91	574.86	251.44	946.08	1,247

The screening facilities can also be used to select items based on the daily trading values. The next example displays the high, low, close and volume for all plantations that had a trading volume greater than 25,000 on each of the days in the timeframe.

```
RESETOPTIONS ◇ AUTOLABEL
1 2 3 4 5 DAILY, DATED 4 4 83 TO 8 4 83
DISPLAY '/Q/(F8=F)∧(F1∩>25000)' SINGSTOCKD 3 2 6 1
```

	4APR83	5APR83	6APR83	7APR83	8APR83
CON. PLANT. BHD.					
HIGH	2.35	2.42	2.44	2.46	2.52
LOW	2.29	2.34	2.31	2.42	2.44
LAST	2.33	2.36	2.43	2.42	2.50
VOLUME	137,000	309,000	417,000	271,000	470,000
K.L. KEPONG.					
HIGH	2.60	2.65	2.62	2.63	2.62
LOW	2.49	2.59	2.56	2.60	2.60
LAST	2.57	2.60	2.61	2.60	2.60
VOLUME	176,000	186,000	148,000	138,000	144,000
ASIATIC DEV. BHD					
HIGH	1.16	1.18	1.20	1.19	1.19
LOW	1.15	1.16	1.16	1.18	1.18
LAST	1.16	1.18	1.19	1.18	1.19
VOLUME	63,000	54,000	36,000	28,000	81,000

Questions regarding this data base should be directed to the Financial data base group at I.P. Sharp, or to the MAILBOX group *MONQ* on the I.P. Sharp MAILBOX system.



SOURCE: SINGAPORE STOCK EXCHANGE DATA BASE

NEW FEATURES FOR ACCESSING U.N. COMMODITY TRADE STATISTICS

Rick Procter

Many new features have been added to the U.N. Commodity Trade Statistics (SITC) data base access software in recent months. These features facilitate improved data retrieval and presentation.

The list of possible trading partners for each of the 28 "reporting" countries in the data base now includes 236 countries and 36 regional groupings. These groupings are defined by the U.N. and include continental divisions, economic groups, and trade associations. For example:

WOR	World	*N.A*	North America
DDA	Developed Economies of Asia	*DGO*	Developing Economies of Oceania
CPE	Centrally Planned Economies of Europe	*EEC*	European Economic Community
LAF	Latin American Free Trade Association	*CRB*	Caribbean

A simple "tree-diagram" in the online SITC directory shows the distribution of countries among the groupings. The value of trade with any given regional grouping is simply the sum of trade with all countries in the group. The directory also contains a listing of all three-letter country codes, short country names and expanded names. In addition to the standard I.P. Sharp country codes, International Standards Organization (ISO) three-letter country codes can now be used.

Increased flexibility has been added to the SITC access software. The right argument of the SITC access keyword consists of five fields of codes, separated by a slash (/). Each code field specifies one of the following: reporter country(ies); partner country(ies); commodity(ies); import, export and/or re-export; value and/or quantity. The order of these fields was formerly predetermined but now you can specify them in any order, and the order determines the order of labelling and data display. All pairwise combinations of codes are accessed with codes in the right-most field (5th) being repeated for each code in the adjacent (4th) field, etc. The following examples illustrate this labelling flexibility.

```
YEARLY DATED 79 TO 81 ◇ SCALE 0 ◇ AUTOLABEL
DISPLAY SITC 'RUSA/E/V/792 793 791/PEUR,EEC,U.K'
```

		1979	1980	1981
UNTD STATES EXP $US				
AIRCRAFT ETC	*EUROPE*	3,002,803	4,570,405	4,737,297
	EEC	2,373,298	3,830,096	3,692,560
	UNTD KINGDOM	645,665	1,476,213	785,559
SHIPS AND BOATS ETC	*EUROPE*	128,387	170,624	332,002
	EEC	102,983	124,266	281,890
	UNTD KINGDOM	14,863	17,615	88,775
RAILWAY VEHICLES	*EUROPE*	34,370	21,865	47,704
	EEC	13,499	10,857	32,716
	UNTD KINGDOM	547	691	1,437

```
DISPLAY SITC 'RUSA/E/V/PEUR,EEC,U.K/792 793 791'
```

			1979	1980	1981
UNTD STATES	EXP $US				
EUROPE		AIRCRAFT ETC	3,002,803	4,570,405	4,737,297
		SHIPS AND BOATS ETC	128,387	170,624	332,002
		RAILWAY VEHICLES	34,370	21,865	47,704
EEC		AIRCRAFT ETC	2,373,298	3,830,096	3,692,560
		SHIPS AND BOATS ETC	102,983	124,266	281,890
		RAILWAY VEHICLES	13,499	10,857	32,716
UNTD KINGDOM		AIRCRAFT ETC	645,665	1,476,213	785,559
		SHIPS AND BOATS ETC	14,863	17,615	88,775
		RAILWAY VEHICLES	547	691	1,437

In the second example, simply reversing the last two access code fields changes the order of the result. This allows for easier comparisons. Note that the country code fields must be preceded by the letters *R* or *P* to distinguish between reporter and partner countries.

If you wish to create global market analysis reports, you can now easily retrieve data for all possible reporting countries or partner countries and groupings, by using the codes */RALL/* for reporters and */PALL/* for partners. In addition, the partner field code */PALLC/* returns data for partner countries only, eliminating data for the regional groupings. Note that when using the */PALL/* country code features, you get the most efficient results when this field is at the lowest access level (right-most field).

The commodity field also has a "code generation" feature. The minus sign (-) is used as a placeholder for all possible digits, so for instance /24--/ retrieves data for all possible four-digit SITC/Rev.2 codes that start with 24 (i.e., all cork and wood products). This feature allows for easy access to a detailed breakdown of trade in a group of related commodities. The following example demonstrates such a report for some chemical products.

```
DISPLAY SITC 'RDEU/E/V/PWOR/5225,5225-'
```

			1979	1980	1981
GERMANY; FR	EXP $US				
WORLD		INORGANIC BASES ETC NES	338,316	423,490	407,653
		AMMONIA;ANHYDROUS ETC	60,944	81,029	72,804
		SODIUM HYDROXIDE; SOLID	32,045	50,778	40,753
		SODIUM HYDROXIDE; OTHER	67,245	99,764	126,763
		POTASSIUM HYDROXIDE ETC	8,768	9,675	8,855
		OXIDES ETC OF MG;SR;BA	3,759	3,302	4,309
		ALUMINIUM HYDROXIDE	36,650	40,506	45,366
		ARTIFICIAL CORUNDUM	36,916	42,988	33,972
		OTH OXIDES;BASES ETC NES	91,989	95,448	74,831

The SITC data base now supports short automatic labelling. Use the MAGIC keyword *SHORTAUTOLABEL* to get reports with abbreviated labelling, one row of labels per time series accessed.

More information on these and other new features of SITC is available in the online description, which you can obtain by typing *SITC 'DESCRIBE'* in 39 *MAGIC*. It also has a table showing the countries and time periods for which data is currently available. The online directory lists the codes for countries and commodities in the data base. To obtain a directory, type *SITC 'DIRECTORY'*. Questions about SITC can be directed to your nearest I.P. Sharp representative or to the MAILBOX group *ECOQ*.

NEW 1981 CANADIAN AGRICULTURAL CENSUS DATA BASE

Bill Lidington

The compiled statistics resulting from the 1981 Canadian Census of Agriculture are now available on the I.P. Sharp timesharing system. The 1981 Census of Agriculture was collected by Statistics Canada with the 1981 Census of Population and Housing. It consists of information obtained from all Canadian farm operations with annual sales or anticipated annual sales of agricultural products valued at $250.00 or more. The data base is cross-sectional in nature as it provides information on 550 agricultural facts for over 2,800 geographical areas of Canada for the year 1981. Geographical detail is given at the national, provincial, census division, and sub-census division levels. The facts describing each geographical area cover a wide variety of socio-economic characteristics, including farm operator statistics, crop and livestock types and volumes, value of production, and employment statistics.

The data is available through 39 *MAGIC*. You can print an online description and 27-page directory by typing:

```
AGCENSUS 'DESCRIBE'
```

and

```
AGCENSUS 'DIRECTORY'
```

The directory may be printed either at your terminal or at the nearest I.P. Sharp highspeed printer. Included in the directory are a list of geographical codes as well as a list of fact codes. The geographical codes are hierarchically structured so that, for example, the five-digit census division identifiers within a province start with the two digit identifier for that province. You can select any group of fact codes during a retrieval, as shown in this example:

```
RESETOPTIONS
AUTOLABEL
'H' DISPLAY '540 542 543' AGCENSUS 'PV/CA'
```

	VALUE OF FARM CAPITAL	VALUE OF MACHINERY AND EQUIPMENT	VALUE OF LIVESTOCK AND POULTRY
NEWFOUNDLAND	115,629,946	12,490,218	9,512,992
PRINCE EDWARD ISLAND	699,470,045	148,971,254	71,653,927
NOVA SCOTIA	897,562,841	150,288,114	114,150,965
NEW BRUNSWICK	667,245,470	141,670,892	85,024,448
QUEBEC	9,468,252,099	1,732,493,811	1,511,688,838
ONTARIO	31,283,174,736	3,462,134,526	2,522,255,175
MANITOBA	10,450,954,346	1,823,612,339	791,619,927
SASKATCHEWAN	31,368,546,039	4,916,910,342	1,403,468,248
ALBERTA	36,827,139,664	4,362,214,708	2,503,765,962
BRITISH COLUMBIA	8,526,380,343	693,366,500	572,001,472

The above example shows various farm capital values aggregated to the provincial level for all reporting provinces.

The directory also defines groups of fact codes, to facilitate the display of tables of information by geographical areas.

```
RESETOPTIONS
AUTOLABEL
'H' TABLE 'AREAH' AGCENSUS 'CD/PV11'
```

```
-------------------------------------------------------------
                              |  KINGS|   QUEENS|   PRINCE
-------------------------------------------------------------
TOTAL AREA                       60,221  116,418   106,384
AREA OWNED                       48,984   87,385    82,390
AREA RENTED                      11,238   29,032    23,995
AREA OPERATED BY OWNERS          23,755   45,623    37,342
AREA OPERATED BY TENANTS          1,151    1,248     2,995
AREA OPER. BY PT OWNERS PT TENENTS 35,316  69,547    66,047
-------------------------------------------------------------
```

The above example shows a breakdown of agricultural land use in hectares by type of operator for the census divisions within Prince Edward Island.

There is no surcharge for using the Canadian Agricultural Census data base. Queries regarding the use of this data base should be directed to the MAILBOX group *ECOQ*.

STATISBUND

Gert Osterburg

Das Statistische Bundesamt der Bundesrepublik Deutschland hat vom Gesetzgeber den Auftrag, umfassendes statistisches Zahlenmaterial zu sammeln, aufzubereiten und den staatlichen Stellen zum Zwecke der Analyse, Prognose und Planung zur Verfügung zu stellen. Dieses Datenmaterial ist aber auch von grossem Interesse für alle gesellschaftlichen und an der politischen Willensbildung beteiligten Gruppen, für die Wirtschaft, die Wissenschaft, Parteien und Verbände ebenso, wie für die breite ffentlichkeit.

Ein umfangreicher Ausschnitt der Datenbank des Statistischen Bundesamtes, STATISBUND, ist nunmehr auch innerhalb des SHARP APL Service verfügbar. STATISBUND umfasst derzeit fast 50 000 Zeitreihen aus den folgenden Bereichen:

- Gebiet und Bevölkerung
- Erwerbstätigkeit
- Unternehmen und Arbeitsstätten
- Land- und Forstwirtschaft, Fischerei
- Produzierendes Gewerbe
- Bautätigkeit und Wohnungen
- Handel, Gastgewerbe und Reiseverkehr
- Aussenhandel
- Verkehr
- Geld und Kredit
- Sozialleistungen
- Finanzen und Steuern
- Wirtschaftsrechnungen
- Löhne und Gehälter

- Preise
- Volkswirtschaftliche Gesamtrechnung

Die Zeitreihen, teils monatlicher, teils vierteljährlicher oder jährlicher Periodizität, reichen teilweise bis ins Jahr 1950 zurück.

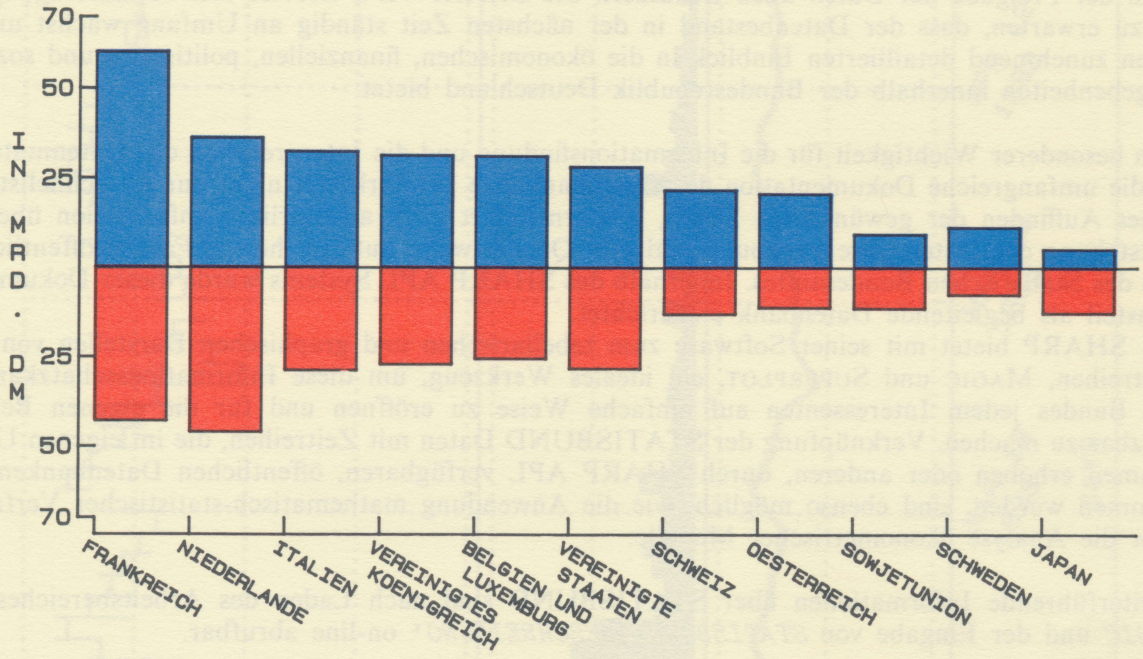
STATISBUND wird vom Statistischen Bundesamt monatlich aktualisiert und steht einige Tage nach der Freigabe der Daten allen Benutzern des SHARP APL Service frei zur Verfügung. Es ist zu erwarten, dass der Datenbestand in der nächsten Zeit ständig an Umfang wächst und so einen zunehmend detaillierten Einblick in die ökonomischen, finanziellen, politischen und sozialen Gegebenheiten innerhalb der Bundesrepublik Deutschland bietet.

Von besonderer Wichtigkeit für die Informationsfindung und die Interpretation des Datenmaterials ist die umfangreiche Dokumentation der Datenbank. Sie gewährleistet nicht nur ein schnellstmögliches Auffinden der gewünschten Daten, sondern liefert auch ausführliche Information über die Entstehung der Daten, ihre Erhebung und gibt Querverweise auf zugehörige Fachveröffentlichungen des Statistischen Bundesamtes. Innerhalb des SHARP APL Systems wurde dieser Dokumentationsteil als begleitende Datenbank eingerichtet.
I.P. SHARP bietet mit seiner Software zum tabellarischen und graphischen Darstellen von Zeitreihen, MAGIC und SUPERPLOT, ein ideales Werkzeug, um diese Informationsschatzkammer des Bundes jedem Interessenten auf einfache Weise zu eröffnen und für die eigenen Belange nutzbar zu machen. Verknüpfung der STATISBUND Daten mit Zeitreihen, die im eigenen Unternehmen erhoben oder anderen, durch SHARP APL verfügbaren, öffentlichen Datenbanken entnommen wurden, sind ebenso möglich, wie die Anwendung mathematisch-statistischer Verfahren oder die Analyse ökonometrischer Modelle.

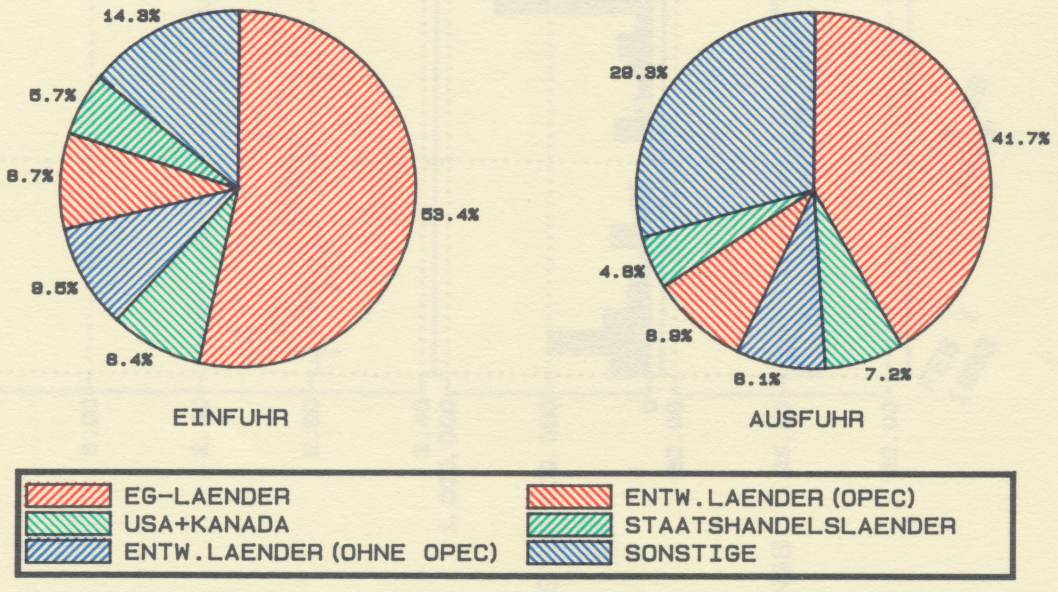
Weiterführende Informationen über STATISBUND sind nach Laden des Arbeitsbereiches `39 MAGIC` und der Eingabe von `STATISBUND 'BESCHREIBUNG'` on-line abrufbar.

AUSSENHANDEL
1982

EINFUHR/AUSFUHR
DIE WICHTIGSTEN
HERSTELLUNGSLAENDER



ANTEIL DER EINFUHR/AUSFUHR
NACH LAENDERGRUPPEN



QUELLE: STATISTISCHES BUNDESAMT WIESBADEN

STATISBUND

Sally Drew

The STATISBUND data base contains a wide range of statistics relating to the economy of West Germany. The data is gathered by West Germany's Statistics Office: the Statistisches Bundesamt. With over 47,000 time series available, the data base is of interest to both commercial and government institutions, and can be used for a variety of studies, including forecasting, strategic planning, and growth and trend analysis.

Updated monthly by the Statistisches Bundesamt, the data base contains monthly, quarterly and yearly time series, with some data going back to 1950. The following subject categories are currently available:

- demographic series
- labour statistics
- business enterprises
- agriculture, forestry and fishing
- production industries
- construction and housing
- tourist industry and domestic trade
- foreign trade
- transportation and communications
- money and credit
- finance and taxes
- social benefits
- personal consumption expenditure
- wages and salaries
- prices
- national accounts

Also available on the I.P. Sharp system is a comprehensive directory (in German) of the STATISBUND data base which is designed to assist users in identifying the appropriate retrieval codes. In order to help you interpret the data correctly, the directory also contains other useful information (reporting units, source, frequency, references to further information, etc.).

STATISBUND data can easily be accessed and displayed using MAGIC, I.P. Sharp's package for data retrieval, analysis and reporting. MAGIC provides users with a powerful, easy-to-use tool for forecasting and performing other types of analysis on the data. The access keyword used in `39 MAGIC` has the single format:

STATISBUND **series codes**

For example, *STATISBUND* 2022 2023 returns certain unemployment figures. Additionally, STATISBUND data can be combined with other I.P. Sharp public data bases, for example, statistics relating to the economies of other countries.

It is anticipated that the number of time series contained in the STATISBUND data base will be increased in the near future, thus providing researchers, econometricians and planners with a very detailed picture of the economic, financial, political, and social position of West Germany.

Access to the STATISBUND data base is provided without surcharge to all users of the I.P. Sharp

system. Further information can be obtained by typing *STATISBUND 'DESCRIBE'* in the workspace 39 *MAGIC*, or by contacting your local I.P. Sharp representative.

The preceding plot shows the imports and exports of principal trading countries by country groups, using data from the STATISBUND data base.

CHANGES TO THE WORLD DEBT TABLES

Cathy Calvert

The World Bank Debt Tables data base contains information on the external public debt of 101 developing countries. The data base has been recently updated to include 1981 data. Also, the amount of information available for each country has been expanded to as many as 180 data items per country, including some forecast series. Historical time series are available from 1970 to 1981 and the forecast data is available from 1982 to 1989.

The new WDEBT data base is accessible using MAGIC or RETRIEVE. Each country or region is identified by a unique three-character country code. Series are identified using account numbers or four- to six-character account codes. A directory listing all the country and account codes is available online. You can print it at your terminal or at the nearest I.P. Sharp highspeed print facility. To produce the directory, type:

```
      WDEBT 'DIRECTORY' in 39 MAGIC
or    ΔDIRECTORY 'WDEBT' in 55 RETRIEVE
```

The following example uses MAGIC. The constraint to the right of the access keyword causes a search of the data base for countries where Interest Payments (fact 536) as a percentage of Total Debt Service (fact 560) are greater than or equal to 75%. Following the slash are the fact codes for the series to be retrieved for each country that satisfies the constraint for any year between 1978 and 1981.

```
      RESETOPTIONS
      YEARLY DATED 78 TO 81
      SCALE 1000000
      DECIMALS 1 1
      AUTOLABEL
      DISPLAY WDEBT '(F536÷F560)≥.75/DBTT,INTT,TDST'
8 FOUND. PROCEED? (Y/N): Y
```

	1978	1979	1980	1981
BOTSWANA				
DEBT OUTST.(DISB)- ALL CREDITORS	120.8	134.6	152.2	164.4
INTEREST PAYMENTS- ALL CREDITORS	4.6	5.8	6.7	6.6
TOTAL DEBT SERVICE- ALL CREDITORS	8.1	9.3	12.7	8.6
COMOROS				
DEBT OUTST.(DISB)- ALL CREDITORS	28.0	38.8	49.3	64.4
INTEREST PAYMENTS- ALL CREDITORS	0.1	0.2	0.3	0.3
TOTAL DEBT SERVICE- ALL CREDITORS	0.2	0.2	0.3	0.4
GAMBIA: THE				
DEBT OUTST.(DISB)- ALL CREDITORS	26.7	51.4	95.4	126.4
INTEREST PAYMENTS- ALL CREDITORS	0.2	0.2	0.7	3.2
TOTAL DEBT SERVICE- ALL CREDITORS	0.5	0.3	0.8	4.3
MALDIVE ISLANDS				
DEBT OUTST.(DISB)- ALL CREDITORS	3.9	6.6	24.8	38.8
INTEREST PAYMENTS- ALL CREDITORS		0.1	0.3	0.4
TOTAL DEBT SERVICE- ALL CREDITORS		0.1	0.3	0.6
NIGERIA				
DEBT OUTST.(DISB)- ALL CREDITORS	2347.5	3211.7	4001.2	4651.9
INTEREST PAYMENTS- ALL CREDITORS	49.4	180.2	433.9	495.3
TOTAL DEBT SERVICE- ALL CREDITORS	104.0	237.6	499.6	856.5
TRINIDAD AND TOBAGO				
DEBT OUTST.(DISB)- ALL CREDITORS	417.6	468.7	606.4	658.9
INTEREST PAYMENTS- ALL CREDITORS	22.1	44.1	46.9	72.3
TOTAL DEBT SERVICE- ALL CREDITORS	31.7	53.9	222.1	97.9
SEYCHELLES				
DEBT OUTST.(DISB)- ALL CREDITORS	4.1	12.9	25.2	34.4
INTEREST PAYMENTS- ALL CREDITORS		0.1	0.3	0.3
TOTAL DEBT SERVICE- ALL CREDITORS	0.1	0.2	0.4	0.4
SOLOMON ISLANDS				
DEBT OUTST.(DISB)- ALL CREDITORS	1.2	3.7	7.6	11.5
INTEREST PAYMENTS- ALL CREDITORS				0.1
TOTAL DEBT SERVICE- ALL CREDITORS				0.1

The following RETRIEVE example uses a constraint to search the data base for all those countries with Total Debt Service greater than 5 billion dollars for any year between 1978 and 1981. The Country Name and Total Debt Service for each of the countries that satisfy the constraint are retrieved, then shown.

```
      ΔVIEW 'WDEBT'
      ΔRESULTTYPE 'GLOBAL'
      ΔSCALE 10
      'ANNUAL' ΔTIME 1978 ΔTO 1981
      '/Q/F560>5000' ΔGET 500 560
      (' ',[1] WDE500),⍪WDE560
```

	19781231	19791231	19801231	19811231
NORTH AFRICA AND MID-EAST	5203.7	5556.1	7632.8	8532.1
MORE ADV. MED. COUNTRIES	2385.3	4094.2	4753.4	6704.9
BRAZIL	4476.5	6520.8	8023.5	8616
EAST ASIA AND PACIFIC	6008.9	6650.8	6303.8	7984.2
LATIN AMERICA AND CARIBBEAN	18373.1	25017.1	26871.5	29508.2
MEXICO	6225.4	9966.2	7868.2	8481.7

ADDITIONS TO THE USSTOCK DATA BASE

Nancy Petersons

The USSTOCK data base consists of descriptive and daily trading information for more than 9,000 U.S. equities, mutual funds, and market indicators.

Three new descriptive facts have been added. They are:

```
23  CUSIP NUMBER (WITHOUT EXCHANGE CODE)
24  PREVIOUS CUSIP NUMBERS
25  DATE OF CUSIP NUMBER CHANGE
```

The following example shows how to access CUSIP change information for Acco World Corp. through workspace 39 *MAGIC*. The current CUSIP number is *N*004330106.

```
      'N004330106' USSTOCKD 24 25
I004330106 19830325
```

*I*004330106 is the previous CUSIP number, replaced March 25, 1983.

Fact 24 can be used to search for an old CUSIP number, thus determining an issue's current CUSIP number and name.

```
      'F24=I147576201' USSTOCKD 9 16
1 FOUND. PROCEED? (Y/N) Y
TECFIN CORP           UNIT EX 093083 I878227206
```

This example shows that old CUSIP number *I*147576201 is currently listed as Tecfin Corp. with CUSIP number *I*878227206.

For further information on the USSTOCK data base, consult the *Financial and Economic Data Bases Reference Guide*.

NEW FACTS ADDED TO DISCLOSURE

Steve Bested

The DISCLOSURE data base contains financial and textual information from annual and periodic reports for approximately 8,500 publicly owned companies that have filed with the U.S. Securities and Exchange Commission (SEC). The DISCLOSURE data base has recently been enhanced by the addition of 80 new facts for each company in the annual portion of the data base. The new ratios and aggregate facts comprise all facets of corporate analysis, including data illustrating capital structure, liquidity, coverage, and profitability, as well as per share figures and a variety of price based ratios. Most of the new facts are ratios and aggregates calculated from information provided in the existing balance sheet and income statements. They are complemented by facts based upon pricing information taken from the I.P. Sharp stock price data base USSTOCK. These additions significantly enlarge the scope of the DISCLOSURE data base. You can use new facts when screening companies in the data base, thereby utilizing the facilities provided for complete technical as well as fundamental analysis. The following table indicates the total number of new facts available.

Number of Facts Available

	Before		Additions		Total
balance sheet	43		—		43
income statement	18		—		18
text and management discussion	14		—		14
ratios	20		62		82
other	4		15		19
static	31		3		34
	130	+	80	=	210

All ratios, including percentage figures, are stored to three decimal places. A complete directory of new facts may be obtained by typing the following in 39 *MAGIC*:

```
ADISCLOSURE 'DIRECTORY'
```

The link between DISCLOSURE data and USSTOCK price data is made using the unique I.P. Sharp USSTOCK security number, which remains constant in the event of changes to either the company itself or the securities issued by the company. The USSTOCK security number is provided as static fact 532 in DISCLOSURE and as fact 18 in USSTOCK.

As new companies are added to the DISCLOSURE data base during the weekly updates, they are automatically brought to the attention of Data Base Services personnel, who endeavor to establish the correct match between the company and the appropriate security. Once the link has been established, all current-year and fiscal-year price data is summarized and inserted for as many years as possible, and then all other possible facts are calculated for that company (e.g., fact 426—market value to book value). The USSTOCK data base contains six years of daily data, so there will be a maximum of six years of statistics for each particular price-related fact. Typically it takes several days, from the time a company is added to the DISCLOSURE data base, to the insertion of the subsequent price history from the USSTOCK data base.

Both fiscal and calendar price, and volume data, are updated once a week for those companies with links to the USSTOCK data base. Early every Saturday morning, after the last daily USSTOCK

update for the week, the previous week's data is extracted in order to obtain the most current data, such as annual high, low, and close. The following facts are maintained historically and currently on both a calendar and fiscal basis:

fiscal fact	calendar fact	description
306	311	annual high price
307	312	annual low price
308	313	annual closing price
309	316	indicated annual dividend (most recent)
310	314	shares outstanding (most recent)
318	319	volume traded
305	317	market value
427	482	price earnings ratio
428	481	annual yield
426	—	market value to book value

The share and price information for securities in USSTOCK are adjusted for all splits on their effective date. However, similar adjustments to share-related facts for the corresponding companies in DISCLOSURE are made only when an 8-K or related five-year summary information is filed with the SEC. Typically this will be later than the adjustments made to USSTOCK. In the event of a stock split, therefore, there will be a discrepancy between the share/price data as reported by the company in their financial statements, and the share/price data as determined from the USSTOCK data base. Facts such as calendar- and fiscal-year yield, and calendar-year P/E will be accurate. Facts such as market value to book value, and fiscal-year P/E will no longer be accurate, simply because they are calculated using unadjusted data. In the event a stock split is detected, market value to book value (fact 426) and fiscal year P/E ratio (fact 427) will be reset to 0, as a calculation using adjusted and unadjusted data is not meaningful. They will remain as such until new company annual reports are received with the corrected share data.

The following example illustrates how you can use a combination of the new facts to screen the data base. As well, it shows the new screening operator "between", which is used to select facts occurring within a range. The use of *'DITTO'* allows you to use the first constraint again without respecifying it, and add an additional constraint to reduce further the number of companies found.

```
      RESETOPTIONS ◇ AUTOLABEL
      YEARLY, DATED AT 82
      NOTIMESERIES
      SCREEN←'(F522⊂2800 2899)∧(F477>8)∧(F480>15)∧(F464<0.75)'
      PUT SCREEN ADISCLOSURE 477 480 464
14 FOUND. PROCEED? (Y/N): N
ACCESS TERMINATED

      DISPLAY 'DITTO∧F313⊂20 40' ADISCLOSURE 477 480 464 313
6 FOUND. PROCEED? (Y/N): Y
```

	PCT NET INCOME (BEFORE EXTRA) TO NET SALES	PCT NET INCOME (BEFORE EXTRA) TO COMMON EQUITY	DEBT TO EQUITY	ANNUAL CLOSE (CAL YEAR)
ABBOTT LABORATORIES	11.11	21.12	0.14	38.75
BRISTOL MYERS CO	9.69	19.44	0.06	33.63
KEY PHARMACEUTICALS INC	14.95	30.30	0.02	31.25
MARY KAY COSMETICS INC	11.63	37.11	0.05	25.13
NALCO CHEMICAL CO	9.99	17.69	0.05	29.00
RORER GROUP INC	9.02	17.64	0.11	24.50

The example initially looks at static fact 522 (SIC code) for all chemical and related companies that have a net income to net sales ratio of greater than 8%; a return on equity greater than 15%; and a debt to equity ratio less than 0.75. This screen resulted in 14 companies being found. As this was a larger result than expected, a further constraint was added to specify a current annual close price between $20 and $40. The addition of the last constraint narrowed down the field to 5 companies, which were subsequently displayed.

All of the new facts are calculated by I.P. Sharp Associates to supplement the DISCLOSURE II data base. Standard royalty fees do apply to the new facts, and as usual no royalties are charged for missing or unavailable data. There are no royalty charges for the process of screening the DISCLOSURE data base using constraint searches. Royalties are only charged for the data you actually extract by answering yes to the *PROCEED?* prompt. Please contact an I.P. Sharp representative for details on DISCLOSURE royalty fees.

In summary, it is now possible to screen companies based on any combination of fundamental corporate and static facts, combined with market activity as reflected in price data, in order to provide a complete picture of investment suitability for a range of companies and their securities.

NEW FACILITIES ADDED TO DATA BASE KEYWORDS

Ann Rockley

It is now possible to display the list of fact numbers and corresponding mnemonics and fact descriptions for several data bases, by typing '*LISTFACTS*' to the right of the access keyword in 39 *MAGIC*. For example, using the *NASTOCKD* keyword:

```
      NASTOCKD 'LISTFACTS'
TIMESERIES FACTS:
     1  BID      BID
     2  ASK      ASK
     3  OPEN     OPEN
     4  HIGH     HIGH
     5  LOW      LOW
     6  CLOSE    CLOSE
     7  PCLOSE   PREVIOUS CLOSE
     8  DOLVAL   DOLLAR VALUE
     9  VOLUME   VOLUME
    10  UNUSED   RESERVED FOR FUTURE USE

STATIC FACTS:
    11  SYM      SYMBOL
    12  DESC     DESCRIPTION
    13  CLASS    CLASSIFICATION (INDUSTRIALS=1;MINES=2;OILS=3)
    14  DTADD    DATE STOCK ADDED
    15  DTLQUT   DATE OF LAST QUOTE
    16  ISSUE    ISSUE TYPE
    17  DELIST   DELISTED INDICATOR (1=ACTIVE; 0=DELISTED)
    18  EXCH     EXCHANGE CODE
    19  CUSIP    CUSIP
    20  ECUSIP   CUSIP (ENCLOSED)
    21  SECNUM   SECURITY NUMBER
    22  DTLTRD   DATE OF LAST TRADE
```

Alternatively, if you only want a list of valid fact numbers, type '*FACTS*' to the right of the keyword. For example:

```
      NASTOCKD 'FACTS'
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
```

For a complete description of the facilities available for each keyword simply type '*HELP*' after the keyword. For example:

```
      NASTOCKD 'HELP'
```

This is useful when you have forgotten some of the uses of the keyword, or when you wish to get a description of any new facilities.

The relation "between" has been added to the list of relations available when using constraints. This relation is useful when screening the data base for values which fall in a range. For example:

```
DISPLAY '(CLOSE<100 120)∧ISSUE=1' NASTOCKD 'CLOSE'
```
or
```
DISPLAY '(CLOSE BE 100 120) AND ISSUE EQ 1' NASTOCKD 'CLOSE'
```

which displays the close price for those companies whose close prices are between $100 and $120 inclusively, and whose stock issue type is common. Note the use of the fact mnemonics *CLOSE* and *ISSUE*, instead of the usual fact codes *F6* and *F16* (see list, above).

These new features apply to the following data bases:

CDNBOND	FTSTOCK	TSE300
CDNOPT	FUNDMONITOR	USFLOW
COMMOD	JSCHEDULE	USOPT
DISCLOSURE	NASTOCK	USQFR
FPCORP	OSCHEDULE	USSTOCK
FTACT	SYDSTOCK	YSCHEDULE

NEW CONTRIBUTING WRITERS

Steve Bested — Steve maintains a number of financial data bases. Prior to joining Data Base Services he worked in I.P. Sharp's Vancouver branch in sales and support for three years, and in the Toronto Branch as a senior representative for two years. Steve is a Computer Science graduate of York University. Before joining I.P. Sharp he worked for Woods Gordon and Co.

Sally Drew — Sally joined the London office of I.P. Sharp in Oct. 1979 where she was responsible for education. During the last eighteen months she has worked in the Oslo and Paris offices, and she is now in the Duesseldorf office where she is involved in customer support and marketing of I.P. Sharp's public data bases in Germany.

Sandra Eadie — Sandra joined the I.P. Sharp Victoria office in 1980 after working for four years in the New Brunswick Department of Labour and the British Columbia Central Statistics Bureau. She has just joined the Financial Group in Data Base Services with responsibility for the OPTIONS and TSE300 data bases. Sandra is also working on INFOMAGIC. She has a degree in mathematics from Queens University in Kingston Ontario, and an M.A. in Business Studies from Sheffield University in England.

Karen Hoy — Karen joined I.P. Sharp in 1980 after graduating from the M.B.A. programme at the University of Toronto. She has been working in the Toronto branch, mainly on financial applications for the investment community. After graduating with her B. Comm. from the University of Saskatchewan, Karen came to Toronto to work as a registered representative with A.E. Ames & Co., now merged into Dominion Securities Ames. She has also worked as an analyst with the commercial lending subsidiary of the Canada Permanent Mortgage Corp.

Bill Lidington — Bill joined I.P. Sharp in 1972 as a marketing and support person in the Ottawa office. From 1972 to 1976, he was primarily involved with the Canadian Federal Government as a consultant for a variety of computer systems. During the years 1976 to 1977 Bill opened the Edmonton office of IPSA and served as branch manager. In 1978 he returned to Ottawa and became branch manager there. Bill is a graduate in mathematics from Carleton University in Ottawa.

Gert Osterburg — Gert joined I.P. Sharp's Duesseldorf branch in Oct. 1982. His duties include customer support, and he is involved in developing a system for computer support of genetic engineering. Prior to joining I.P. Sharp he worked for the German Cancer Research Center on various scientific projects, and he also spent a year at IBM's Scientific Research Center at Heidelberg.

Nancy Petersons — Nancy joined I.P. Sharp in Nov. 1978. Since then she has worked as a consultant in Toronto, and in the education area in Toronto and Singapore. Recently she has moved to the Financial Data Base group, supporting USSTOCK. She graduated from Dalhousie University in Halifax with a B.Sc. in Mathematics.

Mark Seltzer — Mark joined I.P. Sharp's data base group in 1979 after receiving a B.I.S. degree from the University of Waterloo, where he also worked as a teaching assistant in the Computer Science faculty. In addition to his primary responsibilities as product manager for SUPERPLOT, he worked on several data base projects. Since 1981 Mark has been the technical services manager at I.P. Sharp's Singapore subsidiary, Singapore International Software Services.

Loon Wai Sum — Wai Sum is a business administration graduate from the University of Singapore. Prior to joining I.P. Sharp's Singapore office as a programmer/analyst in May 1982, she was working with Peat, Marwick and Mitchell's Computer Consultancy Department. Her duties at I.P. Sharp include the development and support of data bases, application system development, and customer support.

PUBLICATIONS

Financial and Economic Manuals	Price
AGDATA, Oct. 1979, 19 pp.	$ 3.00
Commodities Data Base, Mar. 1981, 39 pp.	$ 4.00
TSEINDEXHIST—RETRIEVE View Directory No. 1, Sept. 1979, 4 pp.	—
Bank of Canada Weekly Statistics Data Base, Jan. 1978, 7 pp.	—
Chartered Banks Data Bases, Dec. 1979, 31 pp.	$ 4.00
Financial Post Data Base, Jan. 1980, 74 pp.	$ 6.00
U.S. Consumer and Producer Price Index Data Bases, Mar. 1981, 32 pp.	$ 4.00
Currency Exchange Rates Data Base, June 1982, 30 pp.	$ 3.00
CSO Data Bank Brochure, Mar. 1978, 4 pp.	—
World Bank Debt Tables Data Base, Oct. 1981, 15 pp.	$ 3.00
Money Market Rates Data Base, Jan. 1982, 28 pp.	$ 4.00
CITIBASE Data Base, June 1982, 200 pp. (approx.)	$15.00
CANSIM Mini Base and Supplement, July 1982, 54 pp.	$ 6.00
North American Stock Market Data Base, May 1982, 40 pp.	$ 4.00
Options Data Base, June 1982, 61 pp.	$ 6.00
FUNDMONITOR Data Base, June 1982, 40 pp.	$ 4.00
OECD Data Base, April 1983, 53 pp.	$ 5.00
AUSTOCK Data Base, Aug. 1982, 18 pp.	$ 3.00
Financial and Economic Data Bases Reference Guide, Jan. 1983, 143 pp.	$ 3.00
NPA Data Bases, Sept. 1982, 63 pp.	$ 6.00
Canadian Bonds Data Base, Oct. 1982, 40 pp.	$ 4.00
BI/DATA Data Base, May 1983, 53 pp.	$ 5.00

Related Publications	
MAGIC User's Manual, May 1980, 141 pp.	$ 8.00
RETRIEVE, Apr. 1979, 19 pp.	$ 3.00
SUPERPLOT Brochure, Sept. 1982, 8 pp.	—
SUPERPLOT Reference Card, June 1982	—
SUPERPLOT User's Guide, Oct. 1982, 168 pp.	$12.00
Public Data Bases Catalogue, Dec. 1982, 80 pp.	—
Public Data Bases Overview, June 1983, 35 pp.	—
SHARP APL Public Workspaces Catalogue, Mar. 1982, 72 pp.	—
Using the I.P. Sharp System, Nov. 1982, 28 pp.	—
QUICKDRAW User's Guide, Mar. 1983, 117 pp.	$ 8.00

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